AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims.

1.   (Previously Presented) An intelligent service network, comprising:

a programmable switch; and

a switch controller coupled to said programmable switch, and including a service control means for interfacing with an intelligent service network component of said intelligent service network.

2.   (Original) The intelligent service network of claim 1, further comprising:

an intelligent service network component coupled to said switch controller.

3.   (Previously Presented) The intelligent service network of claim 1, wherein said switch controller further comprises:

a programmable switch support means for providing an interface to said programmable switch; and

a call control means for establishing a connection between ports on said programmable switch.

4.   (Original) The intelligent service network of claim 3, wherein said switch controller further comprises:

a resource control means for allocating resources.

5.   (Original) The intelligent service network of claim 3, wherein said switch controller further comprises:

a management interface means for providing an interface to external management systems.

6.   (Previously Presented) The intelligent service network of claim 1, wherein said programmable switch includes a digital exchange.

7.   (Previously Presented) The intelligent service network of claim 2, wherein said intelligent service network component comprises one of an operator console, an automated response unit, a service switching control point, and a protocol converter.

8.   (Previously Presented) The intelligent service network of claim 2, wherein said intelligent service network component comprises one of a means for accessing data, and a means for interfacing with a caller.

9.   (Previously Presented) The intelligent service network of claim 2, wherein said intelligent service network component comprises one of a network information distribution system database coupled to said switch controller via a network information distribution system server, an applications database, a data distribution system database, and a mainframe database.

10.   (Previously Presented) The intelligent service network of claim 1, further comprising:

a system management system coupled to said switch controller.

11.   (Original) The intelligent service network of claim 1, further comprising:

a force management system coupled to said switch controller.

12.   (Original) The intelligent service network of claim 1, further comprising:

a configuration and provisioning system coupled to said switch controller.

13.   (Previously Presented) The intelligent service network of claim 1, further comprising:

another programmable switch coupled to said switch controller.

14.   (Previously Presented) The intelligent service network of claim 2, further comprising:

another intelligent service network component coupled to said switch controller.

15.   (Canceled)

16.   (Previously Presented) The intelligent service network of claim 1, further comprising:

another switch controller; and

one or more intelligent service network components coupled to at least one of said switch

    controllers.

17.   (Previously Presented) The intelligent service network of claim 1, further comprising:

another programmable switch; and

another switch controller,

wherein each of said switch controllers is coupled to at least one of said programmable

    switches.

18.   (Previously Presented) The intelligent service network of claim 1, further comprising:

another programmable switch coupled to a public switched telephone network, wherein said

    public switched telephone network is coupled to a calling device;

another switch controller, wherein each of said switch controllers is coupled to at least one of

said programmable switches; and

one or more intelligent service network components, wherein each of said one or more

intelligent service network components is coupled to at least one of said switch

controllers.

19.　(Previously Presented) The intelligent service network of claim 18, further comprising:

one or more external networks and resources, wherein each one of said one or more external

networks and resources is coupled to at least one of said one or more intelligent service

network components.

20.　(Original) A messaging interface, comprising:

a means for communicating with a programmable switch using programmable switch

interface messages; and

a means for communicating with an intelligent service network component using

transmission control messages.

21.　(Original) The messaging interface of claim 20, further comprising:

a means for communicating with a system management system using system management

messages.

22.　(Original) The messaging interface of claim 20, further comprising:

a means for communicating with a force management system using force management

messages.

23.   (Original) A method for setting up a call to an intelligent service network component comprising the steps of:

(a) receiving by a switch controller from a programmable switch a first programmable switch application programmer interface message to request service indicating an initial address message was received from a public switched telephone network;

(b) sending a second programmable switch application programmer interface message to command a programmable switch to send an address complete message to said public switched telephone network;

(c) sending a transmission control message to the intelligent service network component;

(d) receiving a transmission control response message from the intelligent service network component;

(e) sending a third programmable switch application programmer interface message to said programmable switch requesting sending of an answer message to said public switched telephone network; and

(f) sending a fourth programmable switch application programmer interface message to said programmable switch requesting connection of a circuit.

24.   (Original) The method of claim 23, further comprising the following steps performed before step (a):

receiving by an originating switch controller from an originating programmable switch a first originating programmable switch application programmer interface message to request service indicating an initial address message was received from a public switched telephone network;

determining that said originating switch controller cannot select the intelligent service network component; and

obtaining an intermachine trunk facility between said originating programmable switch and said programmable switch.

25.　(Original) A method for setting up a call originated via a public switched telephone network to an intelligent service network component, comprising the steps of:

receiving a request for facilities to provide service for the call;

selecting by a switch controller the intelligent service network component;

commanding by said switch controller a programmable switch to provide connections and signal to a public switched telephone network to connect the call to the intelligent service network component; and

sending by said switch controller a call offered signal to the intelligent service network component.

26.　(Original) A method for connecting a call from an intelligent service network component to a terminating party via a public switched telephone network, comprising the steps of:

receiving by a switch controller from the intelligent service network component a request to connect the call to the terminating party indicating a type of the call;

commanding a programmable switch to attain facilities via the public switched telephone network to the terminating party; and

receiving from said programmable switch a message indicating that said facilities have been obtained.

27. (Original) A method for disconnecting a call established between a public switched telephone network and an intelligent service network component, comprising the steps of:

receiving by a switch controller a termination signal obtained from a calling device interconnected to the public switched telephone network indicating that the call is being terminated;

notifying the intelligent service network component that the established call is being terminated; and

commanding by a switch controller a programmable switch to release the call.

28. (Original) The method of claim 27, further comprising the steps of:

commanding said programmable switch to park channels associated with an originating party and the intelligent service network component;

sending the intelligent service network component a call offered message indicating a reorigination request was received from the public switched telephone network; and

commanding said programmable switch to connect the originating party and the intelligent service network component;

wherein said termination signal is a reorigination signal.

29. (Original) A method for transferring a call, connected between a public switched telephone network and a first intelligent service network component from the first intelligent service network component to a second intelligent service network component, comprising the steps of:

receiving from the first intelligent service network component a request to transfer the call;

commanding a programmable switch to park the channel of the call while the call is being

transferred;

selecting by a switch controller the second intelligent service network component;

sending by said switch controller a call offered signal to the second intelligent service

network component; and

commanding by said switch controller a programmable switch to provide connections and

signal to a public switched telephone network to connect the call to the second intelligent

service network component.

30.   (Previously Presented) A communication system for providing telecommunication

services, comprising:

a switch configured to process a call received from a telephony network according to

program instructions; and

a switch controller configured to generate the program instructions to the switch for

distributing the call to a plurality of network components based on availability of the

network components, wherein the network components and the switch controller are

connected over a common data network.

31.   (Previously Presented) A system according to claim 30, wherein the plurality of

network components include an intelligent peripheral configured to provide one of operator

services, and voice response services based on the received call.

32.   (Previously Presented) A system according to claim 30, wherein the plurality of

network components include a network information distribution system configured to access data

including one of customer account information, call routing information, and prepaid call information in response to the received call.

33. (Previously Presented) A system according to claim 30, wherein the plurality of network components include a protocol converter configured to converting protocols of an external resource to a protocol compatible with the data network.

34. (Previously Presented) A system according to claim 30, wherein the plurality of network components include a management system configured to provide one of work force management, provisioning of resources, and configuration of the resources.

35. (Previously Presented) A method for processing a call in a telecommunication system including a plurality of network components communicating with a switch that is capable of being programmed and having a plurality of ports, the method comprising:

transmitting program instructions to the switch for answering a call received by the switch from a telephony network and for selectively distributing the call to one of the ports corresponding to the network components based on availability of the network components, wherein the network components have connectivity to a common data network.